Signals And Transforms

# Overview

[Signals And Transforms](https://github.com/hybridmachine/DSP/releases) is a signal processing platform written in C# for Windows PCs. It is inspired by (but not affiliated with) the book “[The Scientist and Engineer's Guide to Digital Signal Processing](https://www.dspguide.com/) By Steven W. Smith, Ph.D.”. This application is being created primarily as a learning exercise in signal processing but with the hopes that others may find it useful in both their learning and in practical application. Source and binary are freely available on GitHub at <https://github.com/hybridmachine/DSP> and the code is licensed under an [MIT license](https://github.com/hybridmachine/DSP/blob/master/License.txt).

# Signals

# Filters

# Convolution of Signals with Filters

# Workbook File Format

The workbook contains signal, filter definitions and all other session data. This allows users to save their work, share it, and load it later for editing and use. The file format is a sqlite3 database file with the file extension changed to ‘.stw’ (standing for Signals and Transforms Workbook). Users can inspect the inner structure of the file using any freely available sqlite database inspection tool such as “[DB Browser for SQLite](https://sqlitebrowser.org/)”. During early development, the schema is changing often. The latest schema information can be gathered from the data access layer code at <https://github.com/hybridmachine/DSP/tree/master/Signals%20And%20Transforms/DAL>